

SOFTWARE DEVELOPMENT INFRASTRUCTURE

ABSTRACT

5 A software development architecture is provided for constructing a wide range of software development tools. A software development tool can be created by integrating a specification specifying functionality specific to a set of software development scenarios into a software development scenario-independent framework. The integrated specification can then be compiled to create the software development
10 tool. Alternatively, integration can be achieved at runtime without access to source code. The architecture can use any combination of the following: a software scenario independent intermediate representation format, one or more exception handling models capable of supporting a plurality of programming language specific exception handling models, a type system capable of representing the type representations of a plurality of source languages, and a code generator capable of generating code
15 targeted for a plurality of execution architectures.